, ATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

То:

United States Patent and Trademark Office (Box PCT) Crystal Plaza 2 Washington, DC 20231 ÉTATS-UNIS D'AMÉRIQUE

Date of mailing (day/month/year)
02 July 1999 (02.07.99)

in its capacity as elected Office

International application No. PCT/US98/23141

Applicant's or agent's file reference 07985/012WO1

International filing date (day/month/year) 30 October 1998 (30.10.98) Priority date (day/month/year) 31 October 1997 (31.10.97)

Applicant

LAUGHARN, James, A., Jr. et al

		20 May 1999 (20.05.99)		
		20 May 1333 (20.03.33)		
	in a notice effecting	g later election filed with the International Bureau on:		
			-	
2.	The election X was	s		
		s not		
				
		on of 19 months from the priority date or, where Rule 32 ap	plies, within the time limit under	
	made before the expiration Rule 32.2(b).	on of 19 months from the priority date or, where Rule 32 ap	plies, within the time limit under	
		on of 19 months from the priority date or, where Rule 32 ap	plies, within the time limit under	
		on of 19 months from the priority date or, where Rule 32 ap	plies, within the time limit under	

The International Bureau of ₩IPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

F. Zotomayor

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

INTERNATIONAL SEARCH REPORT

International application No. PCT/US98/23141

A. CLAS	SIFICATION OF SUBJECT MATTER		
IPC(6) :E	301L 11/00; B32B 27/04; C07H 1/00; G01N 1/14		
US CL :4	122/50, 101, 159, 186.04; 536/ 25.4, 25.41 International Patent Classification (IPC) or to both nat	ional classification and IPC	
B. FIELI	OS SEARCHED cumentation searched (classification system followed b	y classification symbols)	
		•	
	22/50, 101, 159, 186.04; 536/ 25.4, 25.41	1. 1	n the fields searched
Documentati	on searched other than minimum documentation to the ex	ktent that such documents are included i	ii tile nelus seulenes
NONE			
Et accide de	ata base consulted during the international search (nam	e of data base and, where practicable,	search terms used)
WPIDS on CAS on li			
	UMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appr	opriate, of the relevant passages	Relevant to claim No.
Y	US 4,323,439 A (O'FARRELL) 06 Apri	1 1982, see entire document.	1-102
Y	US 5,346,999 A (CATHCART et al.) 13 document.	3 September 1994, see entire	1-102
Y	US 5,605,839 A (SIMPSON et al.) 25 document.	5 February 1997, see entire	1-102
<u> </u>	ther documents are listed in the continuation of Box C.	See patent family annex.	
<u> </u>			ternational filing date or priority
	Special categories of cited documents: socument defining the general state of the art which is not considered	date and not in conflict with the ap the principle or theory underlying t	plication but cited to understand
į t	o be of particular relevance	-Cindex calcument	the claimed invention cannot be
	earlier document published on or after the international filing date	considered novel or cannot be considered when the document is taken alone	dered to involve an inventive step
	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance;	A RED When the document
•0•	document referring to an oral disclosure, use, exhibition or other means	combined with one or more other su being obvious to a person skilled in	the art
1 .	document published prior to the international filing date but later than the priority date claimed	Date of mailing of the international s	
Date of th	e actual completion of the international search	0 8FEB 1999	•
27 JAN	UARY 1999		
Commiss Box PC	ston, D.C. 20231	JAMES O. WILSON Telephone No. (703) 308-1235	cefe
Facsimile	No. (703) 305-3230	reseptione No. (705) 500 1255	

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

				
Applicant's or agent's file reference	FOR FURTHER ACTION See Notification of Transmittal of In Preliminary Examination Report (Form PCT/		nsmittal of International	
07985/012WO1				
International application No.	International filing date (day	(month/year)	31 OCTOBE	day/month/year)
PCT/US98/23141	30 OCTOBER 1998	IDC	эт остове	K 1997
International Patent Classification (IPC) Please See Supplemental Sheet.	or national classification and			
Applicant BBI BIOSEQ, INC.				
This international preliming Examining Authority and is This REPORT consists of a	total of sheets.	t according to	Article 36.	
been amended and are th	panied by ANNEXES, i.e., she basis for this report and/or stion 607 of the Administrative	heets containii	ng rectifications :	made before this Authority.
These annexes consist of a to	otal of sheets.			
3. This report contains indication	ns relating to the following	items:		
I Basis of the repo	rt			
II Priority				
·		16 :	ind	ustrial applicability
l <u>=</u>	nt of report with regard to	ioveity, inven	itive step of ind	ustrial applicationity
IV Lack of unity of				
V X Reasoned statement citations and expla	nt under Article 35(2) with re mations supporting such state	egard to noveloment	ty, inventive step	or industrial applicability;
VI Certain documents	cited			
VII Certain defects in t	he international application			
VIII Certain observation	as on the international applica	ation		
Date of submission of the demand	Da	te of completio	n of this report	
20 MAY 1999		01 OCTOBER	1999	
Name and mailing address of the IPEA/	US Au	horized officer		JOYCE BRIDGERS
Commissioner of Patents and Tradem Box PCT	•	JAMES O. W	ILSON CV	PARALEGAL SPECIALIST
Washington, D.C. 20231	Tel		(703) 308-1235	CHEMICAL MATRIX
Facsimile No. (703) 305-3230	1		(,	~-/#U- \

International application No.	
PCT/US98/23141	

		the report		
1. This	report ha	s been drawn on the	basis of (Substitute sheets	which have been furnished to the receiving Office in response to an invitation d" and are not annexed to the report since they do not contain amendments):
w	X	_	l application as origin	
			-	
	X	the description,		, as originally filed.
			• •	, filed with the letter of
			pages	, mos with the letter of
	X	the claims,		_ , as originally filed.
				_ , as amended under Article 19.
				, filed with the demand.
				, filed with the letter of
		•	Nos.	, filed with the letter of
	\mathbf{x}	the drawings,	sheets/fig 1-8	, as originally filed.
	ب	•	sheets/ fig NONE	, filed with the demand.
			sheets/ fig NONE	, filed with the letter of
			sheets /fig	, filed with the letter of
2. Th			ed in the cancellation o	f:
	X		NONE	·
	X	the claims,	1405.	
	X	the drawings,	sheets/fig NONE	
3.	to g	o beyond the disclo	sure as filed, as indicated	the amendments had not been made, since they have been considered in the Supplemental Box Additional observations below (Rule 70.2(c)).
4. A NO		l observations, if	necessary:	

International application No.

PCT/US98/23141

P. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applications and explanations supporting such statement STATEMENT Novelty (N) Claims Inventive Step (IS) Claims Inventive Step (IS) Claims Claims Claims Claims Industrial Applicability (IA) Claims Claim	
Novelty (N) Claims Claims Inventive Step (IS) Claims Claims Industrial Applicability (IA) Claims NONE Claims NONE Claims C	.omry
Claims NONE Inventive Step (IS) Claims 1-102 Claims NONE Industrial Applicability (IA) Claims 1-102 Claims NONE CITATIONS AND EXPLANATIONS Claims 1-102 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugged evices or apparatuses similar to the pressure modulation apparatuses and devices instantly claimed, or the use of methods for isolating and purifying nucleic acids, permeating cells, inactivating molecules, and lysing or disrupting tissue for the isolation of specific (macro)molecular components thereof. NEW CITATIONS	
Inventive Step (IS) Claims Claims Industrial Applicability (IA) Claims Claims Industrial Applicability (IA) Claims Cla	Y
Industrial Applicability (IA) Claims Claims 1-102 Claims CITATIONS AND EXPLANATIONS Claims 1-102 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugge devices or apparatuses similar to the pressure modulation apparatuses and devices instantly claimed, or the use of methods for isolating and purifying nucleic acids, permeating cells, inactivating molecules, and lysing or disrupting tissue for the isolation of specific (macro)molecular components thereof. NEW CITATIONS NONE	N
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International application No.

PCT/US98/23141

Supplemental Box (T be used when the space in any of the preceding boxes is not sufficient)							
Continuati n of: Boxes I - VIII	Sheet 10						
CLASSIFICATION: The International Patent Classification (IPC) and/or the National classification are as listed below: IPC(6): BO1L 11/00; B32B 27/04; C07H 1/00; G01N 1/14 and US Cl.: 422/50, 101, 159, 186.04; 536/25.4, 25.46							

PATENT COOPERATION TREAT

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To: CHARLES J. BOUDREAU
FISH & RICHARDSON P.C.
45 ROCKEFELLER PLAZA, SUITE 2800
NEW YORK, NY 10111

RECEIVED

NOV 1 6 1999

PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

FISH & RICHARDSON, P.C NEW YORK CITY OFFICE

OFFICE Date of Mailing (day/month/year)

12 NOV 1999

Applicant's or agent's file reference

07985/012WO1

International application No.

PCT/US98/23141

Applicant

BBI BIOSEQ, INC.

Imaginary

Imaginary

Important Notification

Important Notification

Priority Date (day/month/year)

31 OCTOBER 1997

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4 REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the state of later in some Offices) (Article 39(1)) (see also the reminder sent by the state of th

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

* Wo Docketing Required *
Reviewed UUU System
Enitial:
Enviewed by Enling Secretary

Name and mailing address of the IPEA/US

Commissioner of Patents and Trademarks

Box PCT Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

JAMES O. WILSON CV

JOYCE BRIDGERS
PARALEGAL SPECIALIST
CHEMICAL MATRIX

Telephone No. (703) 308-1235

Form PCT/IPEA/416 (July 1992) *



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 07985/012WO1	FOR FURTHER ACTION	Preuminary Examination Report (1 of in 1 of 711 275 170)		
International application No.	International filing date (day/m	month/year) Priority date (day/month/year)		
PCT/US98/23141	30 OCTOBER 1998	31 OCTOBER 1997		
International Patent Classification (IPC) Please See Supplemental Sheet.	<u> </u>	PC		
Applicant BBI BIOSEQ, INC.				
Examining Authority and is This REPORT consists of a This report is also accome the second are the se	total of sheets. spanied by ANNEXES, i.e., sheet basis for this report and/or she tion 607 of the Administrative	eets of the description, claims and/or drawings which ha heets containing rectifications made before this Authori		
3. This report contains indication		items:		
I X Basis of the report II Priority III Non-establishme IV Lack of unity of V X Reasoned stateme citations and expl VI Certain documents VII Certain defects in	ort nt of report with regard to no invention nt under Article 35(2) with regard to no anations supporting such states	novelty, inventive step or industrial applicability rgard to novelty, inventive step or industrial applicabilisment		
Date of submission of the demand	Date	te of completion of this report		
20 MAY 1999	C	01 OCTOBER 1999		
Name and mailing address of the IPEA Commissioner of Patents and Trade Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	marks	JOYCE BRIDGERS JAMES O. WILSON CV ephone No. (703) 308-1235		



International application No.
PCT/US98/23141

I. Basis of t	he report		
	1	basis of (Substitute sheets w	shich have been furnished to the receiving Office in response to an invitation
under Article	14 are referred to in t	liis report as "originally filed	" and are not annexed to the report since they do not writing uncludiants).
x	the international	application as origina	lly filed.
x	the description,	pages 1-76	, as originally filed.
	-	pages NONE	, filed with the demand.
		pages NONE	, filed with the letter of
			, filed with the letter of
x	the claims,	Nos. <u>1-102</u>	, as originally filed.
		Nos. NONE	, as amended under Article 19.
			, filed with the demand.
			, filed with the letter of
		Nos	, filed with the letter of
. তো	the drawings,	sheets/fig 1-8	, as originally filed.
X			, filed with the demand.
			, filed with the letter of
			, filed with the letter of
2. The amend	the description,	pages NONE	<u> </u>
x	the claims,	Nos. NONE	
x	the drawings,	sheets/fig NONE	_
*			I was had not been made gives they have been considered
3. This to g	s report has been e o beyond the disclo	stablished as if (some of) osure as filed, as indicated	the amendments had not been made, since they have been considered in the Supplemental Box Additional observations below (Rule 70.2(c)).
4. Additiona	l observations, if	necessary:	
NONE			
		•	
	C		



International application No.

PCT/US98/23141

citations and explanations supporting	such statemo	d to novelty, inventive step or industrial appoint	
STATEMENT			
Novelty (N)	Claims	1-102	YE
Novemy (14)	Claims	NONE	NO
		4.400	YE
Inventive Step (IS)	Claims	1-102 NONE	
	Claims	NONE	
		. 102	YE
Industrial Applicability (IA)	Claims Claims	1-102 NONE	NO
	Claims	NONE	
	CT Article 33(2) re modulation a acids, permeati	-(4), because the prior art does not teach or fairly s pparatuses and devices instantly claimed, or the use ng cells, inactivating molecules, and lysing or disrup	
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International application No. PCT/US98/23141

Supplemental Box						(Ciniont)
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Continuation of: Boxes I - VIII

Sheet 10

CLASSIFICATION:

The International Patent Classification (IPC) and/or the National classification are as listed below: IPC(6): BO1L 11/00; B32B 27/04; C07H 1/00; G01N 1/14 and US Cl.: 422/50, 101, 159, 186.04; 536/25.4, 25.46